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Robert E. Malm

In re Application of:

GREGORY E. JOHNSTON.
ARIE LEVINKRON

Serial Number: 09/059,077

Filing Date: 04/09/98

For: MOBILE SURVEILLANCE SYSTEM

Group Art Unit: 2622

Examiner: LUONG NGUYEN

Telephone: (571) 272-7315

**SUBMISSION OF REPLY BRIEF
PURSUANT TO RULE 37 CFR § 41.39 (b)(2)**

Commissioner for Patents
Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Examiner's Answer dated 12/08/06 and pursuant to 37 CFR § 41.39 (b)(2), applicants request that the appeal be maintained and hereby submit a reply brief pursuant to 37 CFR § 41.41.

The Reply Brief addresses each new ground of rejection as set forth in 37 CFR § 41.37 (c)(1)(vii) and follows the other requirements of a brief as set forth in 37 CFR § 41.37 (c). The Reply Brief is NOT accompanied by any amendments, affidavits, or other evidence.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert E. Malm". The signature is fluid and cursive, with the first name "Robert" being more prominent and the last name "Malm" following in a similar style.

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REPLY BRIEF

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STATUS OF CLAIMS

Claims 1-25 are pending in the application.

Claims 4, 8-11, 15-17, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Examiner's Answer, p. 12.

Claims 1-3, 5-7, 12-14, 18-21, and 23-25 were rejected and are being appealed.

STATUS OF AMENDMENTS

No amendments were filed subsequent to final rejection of the claims by the examiner.

REAL PARTY IN INTEREST

The real parties in interest are GREGORY E. JOHNSTON, an individual residing at 1528 Monteval Place, San Jose, California, and ARIE LEVINKRON, an individual residing at 7320 Cirrus Way, West Hills, California.

RELATED APPEALS AND INTERFERENCES

The examiner's earlier rejection of all 25 claims was the subject of Appeal No. 2000-1719.

SUMMARY OF CLAIMED SUBJECT MATTER

1. A mobile pan and tilt camera and display-control apparatus comprising:
 - a fully rotatable camera attached to a mount assembly that is mounted to a vehicle for capturing mobile images (specification: page 8, last paragraph, lines 1-2);
 - a display-control box having an image display screen and control buttons for controlling said camera and its movement, said display-control box being attached to an adjustable mount in said vehicle within an operator's view and reach (specification: page 8, last paragraph, lines 2-5);
 - an image capture box for receiving said captured mobile images (specification: page 8, last paragraph, lines 5-7).
2. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein full rotation is achieved by mounting said camera to a tilting mechanism mounted on a panning mechanism (specification: page 13, last line, through page 14, line 16; Fig. 3: 20, 22, 30, 32, 33, 35, 36, 38, 39, 40).
3. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said mount assembly incorporates a quick disconnect mechanism (specification: page 17, last paragraph through page 18, first paragraph; Fig. 7: 20, 22, 35, 36, 38, 40, 65, 66, 68, 69, 71).

4. A mobile pan and tilt camera and display-control apparatus as claimed in claim 3 further comprising a double locking mechanism on said mount assembly where one mechanism is a security fastener (specification: page 18, first paragraph; Fig. 7: 20, 35, 36, 40, 65, 66, 69).

5. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 further comprising a water seal attached to said tilting mechanism (specification: page 19, lines 9-23; Fig. 8: 20, 84, 85, 87, 88).

6. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly is adapted to engage the roof-rack of a vehicle (specification: page 23, first and second complete paragraphs; Fig. 13: 20, 22, 60, 250, 251, 252; Fig. 14: 22, 63, 67, 68, 270, 272, 274).

7. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly is adapted to engage a THULE[®] brand roof rack system (specification: page 16, last paragraph through page 17, first paragraph; Fig. 6: 20, 22, 34, 35, 36, 38, 40, 52, 60, 62, 63, 64, 65, 66, 67, 68, 69; 70, 71, 72,).

8. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a ball-plunger for self-locking said mount assembly (specification: page 18, first paragraph; Fig. 7: 20, 35, 36, 40, 65, 66, 69).

9. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a security fastener as a secondary and operator activated mechanical locking mechanism for said mount assembly (specification: page 18, first paragraph; Fig. 7: 20, 35, 36, 40, 65, 66, 69).

10. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 further comprising a singular support for both said panning mechanism and said tilting mechanism and separate drive-gears and slip clutches for both said panning mechanism and said tilting mechanism (specification: page 24, last paragraph through page 26, first paragraph; Fig. 17: 150, 155, 156, 157, 160, 166, 167, 168, 300, 301, 302, 303, 304, 305, 306; Fig. 18: 34, 150, 161, 162, 165, 166, 310, 311, 312, 313, 314, 315, 316, 317).

11. A mobile pan and tilt camera and display-control apparatus as claimed in claim 10 wherein each slip clutch comprises:

- a rotationally free gear;
- a support housing for gear;
- a friction pad co-aligned to said gear between said gear and said support housing;
- a wave washer to apply a pressure against said rotationally free gear and said support housing of sufficient force to enable a motor to drive said gear and said support housing to a point where said support housing stops rotating and said rotationally free gear breaks friction of said friction pad while said motor continues to drive without overheating (specification: page 24, last paragraph through page 26, first paragraph; Fig. 17: 150, 155, 156, 157, 160, 166, 167, 168,

300, 301, 302, 303, 304, 305, 306; Fig. 18: 34, 150, 161, 162, 165, 166, 310, 311, 312, 313, 314, 315, 316, 317).

12. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a camera enclosure with bezel opening that is threaded to accept optical filters and is sealed with an o-ring for moisture blocking (specification: page 13, second paragraph, lines 7-8; Fig. 2: 30, 31, 32; page 19, lines 4-6; Fig. 8: 30, 32, 82, 89).

13. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a Field of View (FOV) stabilized camera which provides an electronic compensation to overcome mechanical gear backlash and vibration (specification: page 22, first paragraph; Fig. 10: 156, 157, 158, 159, 161, 162, 164, 165; Fig. 11: 20, 100, 150, 155, 156, 170, 171, 173, 174, 175).

14. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said camera may be mounted at any angle with respect to gravity (specification: page 21, second paragraph; Fig. 10: 20, 34, 40; 150, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 175, 176).

15. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a bimetal heat sink for camera power supply temperature control (specification: page 18, second paragraph through page 19, lines 1-3; Fig. 8: 32, 80, 81, 88, 150).

16. A mobile pan and tilt camera and display-control apparatus as claimed in claim 12 wherein said camera enclosure is adapted to act as an additional heat sink (specification: page 18, last three lines; Fig. 8: 32, 81, 88).

17. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said camera enclosure incorporates a one-way moisture passage plug with flexible and sealed passage for wires (specification: page 19, lines 9-23; Fig. 8: 20, 84, 85, 87, 88).

18. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said display-control box has a set of control buttons positioned to be operated with a single hand (specification: page 8, last paragraph; page 23, last three lines; Figs. 15, 16: 21, 26, 121, 134).

19. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said display-control box has a viewing angle adjustment lever positioned to be operated with said single hand (specification: page 12, second paragraph; Fig. 1: 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 118; page 23, fourth paragraph through page 24, first paragraph; Figs. 15, 16: 21, 25, 26, 27, 121, 130, 131, 132, 133, 134, 135, 137, 138, 140).

20. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising an optically clear or tinted sphere enclosing said camera (specification: page

22, second paragraph through page 23, first paragraph; Fig. 12: 20, 22, 32, 33, 150, 260).

21. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly mates to a YAKIMA^R brand roof rack system (specification: page 23, third paragraph; Fig. 14: 22, 63, 67, 68, 270, 272, 274,).

22. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly includes an adapter plate to mate to a light bar used on emergency and patrol guard vehicles (specification: page 23, second paragraph; Fig. 13: 22, 60, 250, 251, 252).

23. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly is adaptable to a railroad locomotive attachment (specification: original claim 23).

24. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly includes an adapter plate for ship-board attachment (specification: original claim 24).

25. A process for viewing a scene with mobile pan or tilt camera of claim 1 comprising the steps of:

mounting said camera to a vehicle for capturing mobile images;

displaying said captured mobile images on an image display screen;

controlling camera position from within said vehicle;

capturing said captured mobile images in an image capture box for storage and transmission of said captured mobile images; and

transmitting said captured mobile images by radio frequency transmission to a data storage server for further processing; and

providing said captured mobile images on internet server for official or consumer access (specification: page 9, first paragraph).

NEW GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I-NEW. WHETHER CLAIMS 1-3, 5-6, 14, 18-19, AND 24 ARE UNPATENTABLE UNDER 35 U.S.C. § 103(a) IN VIEW OF KLAPPER et al., MARUYAMA et al., AND SEN'NO.

II-NEW. WHETHER CLAIM 12 IS UNPATENTABLE UNDER 35 U.S.C. § 103(a) IN VIEW OF KLAPPER et al., MARUYAMA et al., SEN'NO, SERGEANT et al., AND O'FARRILL et al.

III-NEW. WHETHER CLAIM 13 IS UNPATENTABLE UNDER 35 U.S.C. § 103(a) IN VIEW OF KLAPPER et al., MARUYAMA et al., SEN'NO, AND OHARA et al.

IV-NEW. WHETHER CLAIM 20 IS UNPATENTABLE UNDER 35 U.S.C. § 103(a) IN VIEW OF KLAPPER et al., MARUYAMA et al., SEN'NO, AND TOVI.

V-NEW. WHETHER CLAIMS 23 IS UNPATENTABLE UNDER 35 U.S.C. § 103(a) IN VIEW OF KLAPPER et al., MARUYAMA et al., SEN'NO, AND BOEHLE.

VI-NEW. WHETHER CLAIM 25 IS UNPATENTABLE UNDER 35 U.S.C. § 103(a) IN VIEW OF KLAPPER et al., MARUYAMA et al., SEN'NO, AND KURIJADA.

VII-NEW. WHETHER CLAIMS 7 AND 21 ARE UNPATENTABLE UNDER 35 U.S.C. § 112, SECOND PARAGRAPH.

INTRODUCTION

Applicants' invention is a mobile surveillance system comprising (1) a pan-and-tilt video camera attached to a mount assembly for capturing mobile images, (2) a display-control box having an image display screen and control buttons for controlling the camera and its movement, and (3) an image capture box for receiving the captured images.

It seems appropriate at this point to review the history of the prosecution of this patent application. The application was filed on April 9, 1998 and the first office action was mailed on October 23, 1998. There were 16 references cited, and all claims were rejected based on one or more of the cited references. Applicants provided detailed arguments in the response to the office action for each of the rejected claims as to why none of the references, either separately or in combination, disclosed the limitations of the claim.

The second office action was mailed on April 14, 1999. The examiner stated that applicants' arguments in response to the first office action were moot in view of new grounds of rejection brought about "because claim 1 in the first action was so unclear, the examiner did not realize an important limitation was neglected." The "new grounds of rejection" were the result of the examiner presumably doing another search and adding two additional references, not included in the original 16, which the examiner believed would remedy the problem of the "neglected limitation" of claim 1. Once again, all of the claims were rejected. And once again, applicants provided detailed arguments in the response to the office action for each of the rejected claims as to why none of the references, either separately or in combination, disclose the

limitations of the claims.

The third and final office action was prepared by a new examiner who continued the tradition of rejecting all of the claims.

Since the examiners could find nothing patentable in applicants' invention and believing very strongly that there was nothing in the prior art discovered by the examiners which disclosed applicants' invention, applicants appealed to the Board.

The Conclusion of the Decision on Appeal was brief: "The decision of the examiner rejecting claims 1 through 25 under 35 U.S.C. § 103 is reversed." Applicants then received an office action dated July 4, 2004 once again rejecting all 25 claims. The introductory sentence of the office action stated:

"In view of the decision of the Board of Patent Appeals and Interferences rendered on 12/10/2003, PROSECUTION IS HEREBY REOPENED. A non-final Office Action set forth below [*sic*]."

And the text of the Office Action then continued for 13 pages again rejecting all of the claims based on a "newly-discovered" 1983 reference.

Applicants were surprised by the reopening of prosecution in view of the passage from the Manual of Patent Examining Procedure (MPEP) § 1214.07, "Reopening of Prosecution", which cited 37 CFR 1.198:

"Cases which have been decided by the Board of Patent Appeals and Interferences will not be reopened or reconsidered by the primary examiner except under the provisions of § 1.114 or § 1.196 without the written authority of the Commissioner, and then only for the consideration of matters not already adjudicated, sufficient cause being shown."

Section 1.114 has to do with the filing by the applicants of a request for continued examination which applicants did not do. Section 1.196 has to do with aspects of the Board's decision (e.g. new grounds of rejection, specific statement that a claim may be allowed in amended form, remand), none of which arose in the present situation.

What, then, would constitute "matters not already adjudicated" that would allow the reopening of prosecution and was sufficient cause shown?

A passage from the Manual of Patent Examining Procedure (§ 1214.04, "examiner Reversed") states that:

"If the examiner has specific knowledge of the existence of a particular reference or references which indicate nonpatentability of any of the appealed claims as to which the examiner was reversed, he or she should submit the matter to the Technology Center Director for authorization to reopen prosecution under 37 CFR 1.198 for the purpose of entering the new rejection."

It is important at this point to understand the meaning of "prosecution" insofar as the patenting process is concerned. The term "prosecution" encompasses the entire patenting process. For example, "prosecution history" (according to Black's Law Dictionary) means the complete record of proceedings in the Patent and Trademark Office from the initial application to the issued patent.

"Prosecution" entails "examination" which requires an examiner to "make a thorough investigation of the available prior art relating to the subject matter of the claimed invention." 37 CFR 1.104(a)(1). Thus, a reopened prosecution means a reexamination which includes a new search. Thus, when 37 CFR 1.198 states that cases may be reopened only with sufficient cause

being shown, it does not mean that the examiner may informally reopen prosecution to perform a new search and if the results of the new search provide sufficient cause, request the Technology Center Director to formally reopen prosecution for the purpose of entering the new rejection.

Once a new search has been initiated, it is certain that an examiner will be able to find a reference on the basis of which he or she can argue the unpatentability of an invention. An example is the 04/07/04 Office Action where the examiner continued to argue incorrectly the unpatentability of all of applicants' claims after three searches and for three sets of references.

The key reference which provided the basis for rejecting all of applicants' claims in the 04/07/04 Office Action was Clendenin et al., U.S. Patent 4,386,848 issued on June 7, 1983, some 21 years ago. If the examiner had "specific knowledge of the existence" of this reference, it would seem unlikely that this knowledge was recently acquired, since the patent is so old. And if the examiner in some way became aware of it at an earlier time, why was it not brought forth during the original prosecution of applicants' application?

Applicants' responded to the examiner's 04/07/04 Office Action, based on Clendenin et al., with detailed arguments as to why the "newly-discovered" Clendenin et al. reference, either by itself or in combination with other previously-discovered references, did not disclose applicants' invention.

The examiner responded with a 23-page Office Action dated 01/27/05 which stated that "Applicant's arguments . . . have been fully considered but they are not persuasive" except, apparently for claims 12, 13, and 16 which the examiner conceded would be patentable if rewritten in independent form.

Applicants then appealed to the Board of Patent Appeals and Interferences and filed an

appeal brief based on the same arguments which the examiner had previously "fully considered" and found "not persuasive". However, in rereading applicants' arguments in the Appeal Brief, the examiner appears to have had a change of heart and concluded that Clendenin et al. was not the magic bullet that he thought it was. The introductory sentence of his 09/21/05 Office Action stated:

"In view of the Appeal Brief filed on 7/01/2005, PROSECUTION IS HEREBY REOPENED. A non-final Office Action set forth below [*sic*]."

And the text of the Office Action then continued for 12 pages again rejecting all 25 claims based on a presumably "newly-discovered" Japanese patent to Maruyama et al.

The key reference which now provides the basis for rejecting all of applicants' claims is Maruyama et al., a Japanese patent. If the examiner had "specific knowledge of the existence" of this reference, it would seem unlikely that this knowledge was recently acquired, since an English translation was apparently available in the USPTO in July 1999. And if the examiner in some way became aware of it at an earlier time, the same question posed earlier arises—why was it not brought forth during the original prosecution of applicants' application?

Is Maruyama et al. the reference that will provide the basis for denying patent protection to applicants' invention? Again, the answer is no. Maruyama et al. (and all of the other cited references) fail to disclose at least two of the limitations of claim 1, applicants' only independent claim. And there is a lack of motivation for a person skilled in the art to combine the inventions of Maruyama et al. and a second reference which the examiner proposes as a realization of a third limitation of claim 1.

Applicants responded to the non-final office action resulting from the examiner's

reopened prosecution by requesting that the appeal be maintained pursuant to 37 CFR § 41.39 (b)(2). Applicants chose to interpret the examiner's office action as the Examiner's Answer to applicants' Appeal Brief and submitted a revised version of applicants' Appeal Brief (entitled Supplemental Appeal Brief) as the Reply to the Examiner's Answer. The Supplemental Appeal Brief (applicants' Reply) addressed each new ground of rejection as set forth in 37 CFR § 41.37 (c)(1)(vii) and followed the other requirements of a brief as set forth in 37 CFR § 41.37 (c).

The entering of new grounds of rejection in the Examiner's Answer to applicants' Appeal Brief was until recently prohibited by 37 CFR 1.193(a)(2), *Examiner's Answer and Reply Brief*. This prohibition was removed in 2004 by 37 CFR 41.39(a)(2), *Examiner's Answer*. The reason for this revision, according to the Federal Register, was to "improve the quality of examiner's answers and reduce pendency by providing for the inclusion of the new ground of rejection in an examiner's answer without having to reopen prosecution." The Federal Register went on to say that reopening prosecution for the purpose of entering a new ground of rejection should only be used under special circumstances: "Where, for example, a new argument(s) or new evidence cannot be addressed by the examiner based on the information then of record." No such special circumstances exist in the case of applicants' patent application.

Applicants therefore, pursuant to 37 CFR 1.182, petitioned the Director to instruct the examiner to maintain applicants' appeal by rescinding his decision to reopen prosecution of applicants' patent application and furnishing a written Examiner's Answer to applicants' appeal brief.

The examiner's statement that "in view of the Appeal Brief filed on 7/01/2005, prosecution is hereby reopened" appears to be a de facto withdrawal of his claim rejections

based on Clendenin et al. and the substitution of new grounds of rejection based on a new reference Maruyama et al.

It would be more in keeping with 37 CFR § 41.39 if the examiner were to entitle his latest office action as his Examiner's Answer to applicants' Appeal Brief and to unambiguously state that he is withdrawing his previous grounds of rejection based on Clendenin et al. and including new grounds of rejection based on Maruyama et al. Whereas this action by the examiner would have been prohibited under prior rule 37 CFR § 1.193(a)(2), it is now permitted under 37 CFR § 41.39(a)(2). The Federal Register explains the reason for allowing examiners to include new grounds of rejection in their answers to appeal briefs as follows (see boldface portion):

Section 41.39 is added to generally incorporate requirements found in former Rule 193(a).

Section 41.39(a)(2) is added to permit a new ground of rejection to be included in an examiner's answer eliminating the former prohibition of new grounds of rejection in examiner's answers. Many appellants are making new arguments for the first time in their appeal brief (apparently stimulated by a former change to the appeal process that inserted the prohibition on new grounds of rejection in the examiner's answer). Because the current appeal rules only allow the examiner to make a new ground by reopening prosecution, some examiners have allowed cases to go forward to the Board without addressing the new arguments. Thus, the revision would improve the quality of examiner's answers and reduce pendency by providing for the inclusion of the new ground of rejection in an examiner's answer without having to reopen prosecution. By permitting examiners to include a new ground of rejection in an examiner's answer, newly presented arguments can now be addressed by a new ground of rejection in the examiner's answer when appropriate. Furthermore, if new arguments can now be addressed by the examiner by incorporating a new ground of rejection in the examiner's answer, the new arguments may be able to be addressed without reopening prosecution and thereby decreasing pendency. 69 FR 49963, Aug. 12, 2004 (highlighting added).

In view of the persuasive language shown in boldface encouraging if not mandating the examiner to include new grounds of rejection in his Answer, why would an examiner choose to reopen prosecution in order to introduce a new ground of rejection? The patent office envisions certain circumstances wherein such an action might be preferred (see boldface portion):

It is envisioned that new grounds of rejection in examiner's answers would be rare, rather than a routine occurrence. The Office plans to issue instructions that will be incorporated into the MPEP requiring that any new ground of rejection made by an examiner in an answer must be personally approved by a Technology Center Director or designee and that any new ground of rejection made in an answer be prominently identified as such. It is the further intent of the Office to provide guidance to examiners that will also be incorporated into the MPEP as to what circumstances, e.g., responding to a new argument or new evidence submitted prior to appeal, would be appropriate for entry of a new ground of rejection in an examiner's answer rather than the reopening of prosecution. Where, for example, a new argument(s) or new evidence cannot be addressed by the examiner based on the information then of record, the examiner may need to reopen prosecution rather than apply a new ground of rejection in an examiner's answer to address the new argument(s) or new evidence. 69 FR 49963, Aug. 12, 2004 (highlighting added).

But in the present case there are no new argument(s) or new evidence for the examiner to address. Appellants' arguments appearing in the appeal brief are the same as those appearing in appellants' response to the examiner's office action reopening prosecution after the decision on the first appeal, and appellants have not introduced any new evidence. There is simply no legitimate purpose for the examiner to reopen prosecution to enter new grounds of rejection rather than including the new grounds of rejection in his Answer to appellants' appeal brief.

MPEP § 1207.04 (Reopening of Prosecution After Appeal) falls under the umbrella of 37 CFR § 41.39 and there is a tension between the two in that an examiner has two options for entering a new ground of rejection. He may either reopen prosecution (MPEP § 1207.04) or include the new ground of rejection in his Answer to the appeal brief (37 CFR § 41.39(a)(2)).

This change in procedure brought about by 37 CFR § 41.39(a)(2) is described in the Federal Register as being a revision that "would improve the quality of examiner's answers and reduce pendency by providing for the inclusion of the new ground of rejection in an examiner's answer without having to reopen prosecution." 69 FR 49963, Aug. 12, 2004. Including the new ground of rejection in the examiner's answer is clearly the preferred option. Reopening prosecution is an option only under special circumstances as, for example, when "a new argument(s) or new evidence cannot be addressed by the examiner based on the information then of record." 69 FR 49963, Aug. 12, 2004.

At this point in time, the MPEP does not reflect the views expressed in the Federal Register:

After an appeal brief under 37 CFR 41.37 has been filed and the examiner has considered the issues on appeal, the examiner may:

(A) reopen prosecution to enter a new ground of rejection with approval from the supervisory patent examiner (see MPEP § 1207.04);

(B) withdraw the final rejection and allow the application if the examiner determines that the rejections have been overcome and no new ground of rejection is appropriate; or

(C) maintain the appeal by conducting an appeal conference (MPEP § 1207.01) and draft an examiner's answer (MPEP § 1207.02).

MPEP § 1207.

Note that the simplest option for the examiner is (A) and all he needs is the approval of an SPE. The most complicated option is (C) and the examiner must in choosing this option (1) conduct an appeal conference and (2) draft an examiner's answer. Which will be the most appealing choice for the examiner?

The foreword of the MPEP states that: "The Manual does not have the force of law or the force of the rules in Title 37 of the Code of Federal Regulations." The only Rule governing the entry of new grounds of rejection after appeal appears to be 37 CFR 41.39(a)(2) which states that "an examiner's answer may include a new ground of rejection". The Federal Register provides a rationale for this change from prior Rule 37 CFR 1.193(a)(2) by stating that reopening prosecution is an option for entering a new ground of rejection only under special circumstances as, for example, when "a new argument(s) or new evidence cannot be addressed by the examiner based on the information then of record."

Unless there were such special circumstances in the case of appellants appeal, the examiner should be required to follow the precepts of 37 CFR 41.39(a)(2) and enter the new ground of rejection by way of his Examiner's Answer to applicants' appeal brief.

Appellants have not introduced new amendments or evidence by way of the appeal brief. There is nothing lacking in the record which would prevent the examiner from entering a new ground of rejection in his Examiner's Answer to applicants' appeal brief.

Applicants have been prosecuting this patent application for almost eight years. All 25 claims (with no substantive amendments since they were filed) have been finally rejected three times on the basis of three different sets of references. The first rejection was followed by an appeal which resulted in a complete reversal of the examiner's rejections. The examiner presumably did another search, again rejected all claims based on a new set of references, and appellants again appealed. The examiner reviewed this second appeal brief (which contained the same arguments presented in appellants' earlier response to the examiner's office action) and concluded that his rejections were incorrect. He presumably did still another search, and again

rejected all claims based on a third set of references.

Over an eight-year period, the examiners have come up with four sets of references with which to reject appellants' claims, and appellants have appealed once and won and are now in the midst of a second appeal. Three separate and distinct appeal briefs have been prepared.

Applicants' petition was granted and the examiner's 09/21/05 non-final Office Action reopening prosecution was vacated. The Decision on Petition concluded with this statement:

"The application is being returned to the examiner for new and appropriate action responsive to the Appeal Brief filed July 1, 2005 taken together with the Reply Brief [Supplemental Appeal Brief] filed November 3, 2005."

In response to this instruction, the examiner has chosen to ignore the Appeal Brief filed July 1, 2005 and instead provide an Examiner's Answer to Supplemental Appeal Brief filed November 3, 2005.

In addition, the examiner took this instruction from the Decision on Petition as an opportunity to perform still another search and introduced seven new grounds of rejection based on four new references.

The results of this new search have been no more productive of evidence of unpatentability of applicants' claims than past searches.

ARGUMENT

I-NEW. WHETHER CLAIMS 1-3, 5-6, 14, 18-19, AND 24 ARE UNPATENTABLE UNDER 35 U.S.C. § 103(a) IN VIEW OF KLAPPER et al. (U.S. 5,729,016), MARUYAMA et al. (JP 08-116476), AND SENNO (JP 08-160874).

CLAIM 1

Claim 1 reads as follows:

- I. *A mobile pan and tilt camera and display-control apparatus comprising:*
a fully rotatable camera attached to a mount assembly that is mounted to a vehicle for capturing mobile images;
[1] a display-control box having an image display screen and control buttons for controlling said camera and its movement, [2] said display-control box being attached to an adjustable mount in said vehicle within an operator's view and reach;
an image capture box for receiving said captured mobile images.

None of the references disclose limitation [1] and limitation [2] shown in boldface above.

Limitation [1]

Klapper et al. discloses a control box having no display (Fig. 1, 566; col. 6, lines 7-8). The examiner seems to have overlooked this fact (see 09/21/05 Office Action, p. 3 and Klapper et al., col. 4, lines 5-51, which points out in some detail that the display can be in a variety of places other than in remote control unit 566).

The examiner now agrees:

"Klapper et al. fails to specifically disclose a display-control box (i.e., the display and the control box are integrated in one box)." Examiner's Answer, p. 6.

Maruyama et al. discloses (Figs. 1-4) a display-control box but the display-control box has no provision for controlling the movement of the camera. The examiner agreed in his .09/21/05 Office Action:

"Maruyama fails to specifically disclose a mobile pan and tilt camera, display-control box for controlling the movement of camera and said display-control box being attached to an adjustable mount in said vehicle within an operator's view and reach." (Emphasis added) .09/21/05 Office Action, p. 3.

The examiner now concludes that:

"The operation buttons 6 control functions of the remote camera 2 (Paragraph [0027]). Therefore, Maruyama et al. teaches to one of ordinary skill in the art the integration of camera controls and a camera display in a single compact unit." Examiner's Answer, p. 6.

Maruyama et al. did not envision using pan-and-tilt cameras (see discussion below under the *Limitation [3]* heading) and obviously did not envision including camera movement controls among the operation buttons 6 (see Maruyama et al., ¶ 27).

None of the references discloses "a display-control box having an image display screen and control buttons for controlling said camera and its movement."

Limitation [2]

Neither Maruyama et al. nor Klapper et al. disclose a display-control box that includes both a display and controls for controlling the movement of the camera. Nor do either of the references disclose such a display-control box "attached to an adjustable mount in said vehicle within an operator's view and reach."

The examiner originally cited Klapper et al.'s remote control unit 566 (Fig. 1; col. 4, lines 44-51) as being a disclosure of limitation [2] (09/21/05 Office Action, p.3), but nothing is disclosed as to Klapper et al.'s remote control unit being attached to an adjustable mount or to the remote control unit being within an operator's view and reach.

The examiner now agrees that neither Klapper et al. nor Maruyama et al. disclose "said display-control box being attached to an adjustable mount in said vehicle" (Examiner's Answer, p. 6) and attempts to remedy this problem by citing Sen'no as filling the gap in his argument.

Sen'no discloses a way of mounting an image display monitor such as those used as TV and navigation monitors on the dashboard of a vehicle and presumably within an operator's view and reach. Sen'no, p. 4. Sen'no's invention might be suitable for mounting Klapper et al.'s liquid crystal display (LCD) (Klapper et al., col. 4, lines 15-20). However, as has been pointed out, Klapper et al.'s display is not the counterpart of applicants' display-control box.

The combination of Klapper et al. and Maruyama et al. does not result in applicants' display-control box and the combination of Klapper et al., Maruyama et al., and Sen'no does not result in applicants' display-control box attached to an adjustable mount in said vehicle within an operator's view and reach.

To establish *prima facie* obviousness, one must have a disclosure of each of the claim limitations by the prior art, motivation on the part of a person skilled in the art to combine the prior-art references, and a reasonable probability of success in accomplishing the combination:

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or

suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." MPEP § 2142.

Since neither Klapper et al., Maruyama et al., and Sen'no, either separately or in combination, disclose claim limitations [1] and [2], there is no point in discussing motivation and probability of success. The examiner has not established *prima facie* obviousness insofar as limitations [1] and [2] are concerned.

Conclusions

The examiner has nominated three references—Klapper et al., Maruyama et al., and Sen'no—as together disclosing applicants' limitations [1] and [2]:

[1] a display-control box having an image display screen and control buttons for controlling said camera and its movement, [2] said display-control box being attached to an adjustable mount in said vehicle within an operator's view and reach.

Let us examine what each of these references contributes to the disclosure of these two limitations:

Klapper et al. - liquid crystal display (LCD) (no indication of controls of any sort) mounted on dashboard (col. 4, lines 15-21) and a separate remote control unit for controlling the camera and its movement mounted inside the vehicle (col. 4, lines 44-51).

Maruyama et al. - liquid crystal display (LCD) together with control buttons for shooting, playback, TV reception, and the like (nothing having to do with controlling the movement of the hand-held camera with which it is associated). ¶ [0026]

Sen'no - a dashboard attaching device for a liquid crystal display. p. 6.

Only Klapper et al. discloses the functional elements of limitation [1]: an "image display screen" and a remote control unit having "control buttons for controlling said camera and its movement". The problem with Klapper et al., insofar as disclosing applicants' limitation [1], is that Klapper et al.'s image display screen and remote control unit are separate units and there is no motivation for a person skilled in the art to combine the two into a single unit.

The Klapper et al. inventors, presumably well-skilled in the art, describe all kinds of ways of displaying the camera images (col. 4, lines 5-40) but never suggest the possible desirability of integrating the image display screen and remote control unit into a single unit and mounted in such a way that the visual information and the camera controls were conveniently at hand to the operator.

The examiner seems to believe that a person skilled in the art who reads Maruyama et al.'s description of a hand-held camera and an associated picture display unit with buttons for turning the camera on and off and similar such operations (not including pointing the camera) would be inclined to reinvent the Klapper et al. invention and combine the display and remote control unit into one box. The examiner's rationale is:

"Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Klapper et al. by the teaching of Maruyama in order to allow a user in a vehicle to remotely operate a camera while viewing the images captured by the camera mounted outside the vehicle.." Examiner's Answer, p. 6.

Although the examiner, after exposure to applicants' specification and claims, recognizes the value of applicants' idea for combining the display and camera controls into one unit, the idea would not be so obvious to persons skilled (e.g. Klapper et al.) in the art who had no such exposure.

With respect to limitation [2], "said display-control box being attached to an adjustable mount in said vehicle within an operator's view and reach", Klapper et al. do not indicate a need for an adjustable mount for either the display device or the remote control unit. At this point, the examiner's arguments become particularly tenuous. The examiner would have us believe that a person skilled in the art would be motivated in reading Maruyama et al. to combine Klapper et al.'s display device and remote control device into an integrated device modeled on Maruyama et al.'s hand-held display-control box which does not have the functional equivalence of Kapper et al.'s display device and remote control device. Then the person skilled in the art, after reading Sen'no, would be motivated to mount the Maruyama et al.-like display-control box on the dashboard utilizing the adjustable attachment device described by Sen'no, even though Sen'no's invention has to do with mounting TV and navigation display monitors (p. 4) anywhere in the interior of a vehicle (see Figs. 1, 9, 10, and 11) and having nothing to do with mounting a unit having controls for pointing a roof-top camera.

The examiner argues that a person skilled in the art would be motivated "to modify the device in Klapper et al. and Maruyama and by the teaching of Sen'no in order to allow a vehicle's operator to adjust the display in both a height adjustment direction and angle adjustment direction so as to permit the display and controls to be adjustable to the users' physical size and personal preferences." pp. 6-7. However, Klapper et al. describes the use of a variety of display devices (see col. 4, lines 5-43) of which most would be incompatible with the Sen'no attachment device. It would seem unlikely that a person skilled in the art would choose to give up this flexibility in display devices for the purposes of "a user's physical size or personal preferences."

None of the references disclose limitations [1] and [2] and based on this fact alone, claim 1 is not obvious in view of Klapper et al., Maruyama et al., and Sen'no. In addition, there is no motivation to be found in any of the references or based on common sense for combining the references as the examiner suggests.

CLAIM 2

Claim 2 reads as follows:

2. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein full rotation is achieved by mounting said camera to a tilting mechanism mounted on a panning mechanism.*

As stated in the SUPPLEMENTAL APPEAL BRIEF, claim 2 stands or falls with claim 1.

CLAIM 3

Claim 3 reads as follows:

3. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said mount assembly incorporates a quick disconnect mechanism.*

The preferred embodiment of applicants' invention utilizes a quick-disconnect mechanism to attach the camera to the mount assembly:

"Said mobile pan and tilt camera (20) is brought to said mounting assembly (22) and is offset by the pitch of said slotted teeth (38) such that they miss said slotted teeth (71) and said mounting plate (68) moves into cavity in said mobile pan and tilt camera (20). Said mobile pan and tilt camera (20) is then moved relative to said mounting assembly (22) to remove offset of said slotted teeth (38 & 71). This last sliding action engages said electrical male signal connector (40) with said electrical female signal connector (65) and said ball-pin plunger (36) drops into said locking hole (69)." Specification, pp. 17-18.

The actions are performed in reverse order to remove the camera from the mount assembly.

This disconnect process can be performed in seconds without tools and the attachment means is therefore characterized as a "quick-disconnect" mechanism.

The examiner argues that Klapper et al.'s disclosure of utilizing three bolts to attach a camera to a vehicle roof-rack is a disclosure of applicants' quick-disconnect system. Examiner's Answer, p. 7.

Klapper et al.'s bolting approach to attaching a camera to a roof-rack is a conventional approach to attaching hardware elements to one another. It requires tools and a generous allotment of minutes to accomplish. It certainly cannot be characterized as "quick" since it is basically the standard approach to attaching one hardware element to another and takes minutes rather than seconds to perform.

The examiner argues that "[l]acking any claimed structure or parameters defining the relative term 'quick disconnect', the three bolt system taught by Klapper et al is seen to be a quick disconnect system." Examiner's Answer, p. 7.

The examiner is wrong in his conclusions. The term "quick-disconnect" has become a well-know and well-understood way of characterizing connectors used in hydraulic, electrical, and many other arts. A search by GOOGLE of "quick disconnect" reveals 1,150,000 listings, none of which are likely to have anything to do with nuts and bolts as fasteners.

If the examiner were uncertain as to the meaning of "quick-disconnect" in the context of attachment mechanisms, is would have been appropriate for him to consult applicants' Specification:

"Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005).

Certainly, the Specification makes clear that applicants' "quick-disconnect" mechanism had no kinship whatsoever with an ordinary nuts-and-bolts attachment means.

Klapper et al. does not disclose a quick-disconnect mechanism for attaching a camera to a mount assembly and consequently, the examiner has not established the *prima facie* obviousness of claim 3.

CLAIM 5

Claim 5 reads as follows:

5. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 further comprising a water seal attached to said tilting mechanism.*

The examiner argues that Klapper et al. discloses a water seal attached to said tilting mechanism (water-resistant case, Column 13, Lines 65-67). Examiner's Answer, p. 7

Klapper et al. does not disclose a water seal attached to the tilting mechanism (see Fig. 3). The passage cited by the examiner (col. 13, lines 65-67) states that "[t]he camera 1104 again preferably uses uncooled detectors, high-speed, precision reflective optics, and signal processing electronics housed in a compact, water-resistant case." A "water-resistant case" is not a "water seal attached to the tilting mechanism."

The examiner's response to applicants' arguments was as follows:

"In response, the examiner considers that Klapper et al. does disclose this feature. Clapper et al. discloses camera 1104 uses a water-resistant case, and camera 1104 is mounted by a positioning mechanism 1105 providing tilting and panning mechanisms (Figure 16, Column 13, Line 65 - Column 14, Line 5). 01/27/05 Office Action, p. 6, Examiner's Answer, p. 12.

The examiner seems to be saying that a camera housed in a water-resistant case 1 which is mounted to pointing mechanism 500 (see Fig. 2) implies that there is a water seal where the camera and case attaches to the pointing mechanism. However, no such water seal is shown in the drawing (see Fig. 3), and no such water seal is described (see col. 4, line 52 - col. 5, line 67).

None of the references disclose the water seal of claim 5, and consequently, the examiner has not established the *prima facie* obviousness of claim 5.

CLAIM 6

Claim 6 reads as follows:

6. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly is adapted to engage the roof-rack of a vehicle.*

Applicants in claim 6 claim "a mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly is adapted to engage the roof-rack of a vehicle."

The question that must be answered before considering the prior art is the meaning of the term "roof-rack of a vehicle".

"A fundamental principle contained in 35 U.S.C. 112, second paragraph is that applicants are their own lexicographers. They can define in the claims what they

regard as their invention essentially in whatever terms they choose so long as the terms are not used in ways that are contrary to accepted meanings in the art." MPEP § 2173.01.

The dictionary definition of "rack" is "a framework on which articles or materials are arranged or deposited." *The Random House College Dictionary, Revised Edition*, Random House, Inc., New York, N.Y. (1988). By standard grammatical construction, a "roof-rack" is a rack located on a roof. A "roof-rack of a vehicle" is a rack that attaches to the roof of a vehicle and on which can be placed a variety of different articles or materials. Well-known engineering principles and cost efficiency dictate the structure of a roof rack to be based on two spaced-apart members that can be fastened to a vehicle roof and to which different articles (such as luggage carriers, bicycles, etc.) can be attached. Such vehicle roof racks are a standard commodity exemplified by Thule^R-brand and Yakima^R-brand roof racks. Specification, pp. 16-17, 23.

The claim language "said mount assembly is **adapted to engage** the roof-rack of a vehicle" suggests that the mount assembly is designed to mount on a more-or-less general-purpose roof-rack without change to the roof-rack. The expression "adapted to" is typically used in claims to express the idea that the design of an invention is adjusted to match an existing design of some other object. *See In re Venezia*, 189 USPQ 149 (CCPA 1976).

The examiner cites Klapper et al. as disclosing applicants' "mount assembly . . . adapted to engage a roof-rack of a vehicle". "Specifically", the examiner argues, "the camera mount 538/556 is bolted to roof rack cross member 1014." Examiner's Answer, p. 7..

But that is not what Klapper et al. discloses. Klapper et al. discloses custom "mounting hardware 1012" that can secure a camera to the roof of a vehicle—not to the roof-rack of the vehicle. Klapper et al., col. 3, lines 48-53; col. 4, lines 1-4. Klapper et al.'s "mounting hardware

1012" consists of a single member that is incapable of serving as a "roof-rack"—"a framework on which articles or materials are arranged or deposited." Klapper et al.'s "mounting hardware 1012" is custom-designed to mate with Klapper et al.'s "pointing mechanism 500". Klapper et al.'s "pointing mechanism 500" is not adapted to engage the traditional vehicle roof-rack.

Klapper et al. does not disclose a camera having a mount assembly that is adapted to engage the roof-rack of a vehicle.

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970)." MPEP § 2143.03.

Since none of the cited references disclose a "mount assembly adapted to engage a roof-rack of a vehicle", *prima facie* obviousness has not been established for claim 6.

CLAIM 14

Claim 14 reads as follows:

14. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said camera may be mounted at any angle with respect to gravity*

As stated in the SUPPLEMENTAL APPEAL BRIEF, claim 14 stands or falls with claim 1.

CLAIM 18

Claim 18 reads as follows:

18. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said display-control box has a set of control buttons positioned to be operated with a single hand.*

Claim 18 states that a set of the claim-1 "control buttons for controlling said camera and its movement" are positioned to be operated with a single hand. The examiner argues that Maruyama et al. "discloses said display and control system have a set of control buttons positioned to be operated with a single hand" and draws this conclusion from Fig. 1. Fig. 1, however, shows Maruyama et al.'s display-control box with control buttons positioned for operation by the fingers of both hands while the box is being held by both hands (see Figs. 8, 25, 26, and 63). This "fingers-of-both-hands" operating procedure is repeatedly emphasized by Maruyama et al.

"Further, the configuration is such that even when the shooter is holding the lower portion of the left and right sides of the casing of the VTR element with two hands, all means of operating controls are positioned within the reach of the fingers of the two hands." Maruyama et al., paragraph [0015].

"[As shown in Figs. 1 and 2] Operation buttons, operation dials, and the like are positioned so as to be concentrated in about the lower half of the front surface of casing 4, on the upper right side of the front surface, and near the front at the top of the right lateral surface. These control operation elements (system operation control elements for shooting, playback, TV reception, and the like) are all positioned to be within reach of

the fingers without having to change handholds when holding the lower portion of the left and right lateral surface of casing 4, as described further below." See next quotation. Maruyama et al., paragraph [0026].

"It is possible for both hands to hold the lower portion of the right and left lateral surfaces of casing 4 of VTR element 1 with VTR element 1 and camera element 2 in an integrally joined state." Maruyama et al., paragraph [0032].

Although mention is made (Maruyama et al., paragraph [0037]) and figures shown (Figs. 57, 58, and 65) of a user holding the display-control box with one hand, there is nothing in Maruyama et al. to suggest that the control buttons are operable with one hand as claim 18 specifies. In fact, every drawing in Maruyama et al. which shows control buttons being operated (Figs. 21, 22, 25, 26, 49, 57, 58, 63, and 65) show a thumb or both thumbs operating the controls supported by fingers on the rear of the display-control box. Note for example Fig. 65 which shows a hand positioned to operate controls on the right side of the display-control box. The controls on the left side cannot be reached.

The examiner argues that if Maruyama et al.'s display-control box were mounted to a vehicle dashboard using Sen'no's attachment device, then all of Maruyama et al.'s controls could be reached by fingers of one hand. Examiner's Answer, p. 8. The examiner also argues that "Maruyama et al. discloses that a user can hold the display-control box with one hand (paragraph [0037], Figures 57, 58, and 65), This indicates that the user can operate the control buttons with one hand." Examiner's Answer, p. 13.

The examiner does not recognize that Maruyama's hand and fingers in Fig. 65 are performing two functions: one function is holding the display-control box, the other is providing a support for the thumb in operating the controls. There is a reason that users of cell phones send text messages using their thumbs to hit the buttons while their hands are holding their cell phones and at the same time providing support and reference positions for their thumbs.

Maruyama et al. does not disclose a display-control box which has a set of control buttons positioned to be operated with a single hand and consequently, does not disclose applicants' claim-18 invention.

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970)." MPEP § 2143.03.

The prior art cited by the examiner does not disclose the limitations of claim 18. Since the limitations of claim 18 are not disclosed by the prior art, there is no way that a person skilled in the art would be motivated to incorporate such limitations in the Maruyama et al. invention.

The examiner has not established the *prima facie* obviousness of claim 18.

CLAIM 19

Claim 19 reads as follows:

19. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said display-control box has a viewing angle adjustment lever positioned to be operated with said single hand.*

Sen'no discloses in Fig. 1 an image display monitor 1 attached to a direction pin 6 which terminates in the ball-portion of universal joint 4. The operator adjusts the viewing angle of the image display monitor 1 by loosening direction pin fixing screw 14 (Fig. 8), taking hold of the image display monitor and adjusting its angle with respect to universal joint 4, and while holding the image display monitor at the desired viewing angle, tightening the direction pin fixing screw 14 so that the image display monitor 1 remains fixed in position. Note that the adjustment of the viewing angle requires the operator to use two hands, one hand holding the image display monitor 1 in the desired position and the other hand tightening the direction pin fixing screw 14. Thus, Sen'no does not disclose a "viewing angle adjustment lever" nor does Sen'no disclose any way of adjusting the viewing angle using only a single hand.

The examiner argues that Sen'no discloses the limitations of Claim 19, but he is clearly wrong.

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970)." MPEP § 2143.03.

The prior art cited by the examiner does not disclose the limitations of claim 19. Since the limitations of claim 19 are not disclosed by the prior art, there is no way that a person skilled in the art would be motivated to incorporate such limitations in the Maruyama et al. invention.

The examiner has not established the *prima facie* obviousness of claim 19.

CLAIM 24

Claim 24 reads as follows:

24. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly includes an adapter plate for ship-board attachment.*

Klapper et al. does not disclose a mount assembly which includes an adapter plate for ship-board attachment. Fig. 15 which was cited by the examiner as such a disclosure (01/27/05 Office Action, p. 16; 09/21/05 Office Action, p. 5) does not show an adapter plate nor does the discussion of Fig. 15 (col. 13, lines 41-52) disclose an adapter plate.

The examiner responded to this argument by arguing that "Klapper et al. discloses a night vision camera 1101 mounted below the bridge of a marine vessel 1103. Therefore, this reads on 'a mount assembly which includes an adapter plate for ship-board attachment'." 01/27/05 Office Action, p. 8.

A disclosure that "a night vision camera 1101 is mounted below the bridge of a marine vessel 1103" is not a disclosure of "a mount assembly which includes an adapter plate for ship-board attachment."

The examiner responded to this argument by stating "an adapter plate for ship-board attachment is inherently included in the mount mechanism of the camera to attach the amount mechanism to the bridge of the marine vessel." Examiner's Answer, pp. 8, 13.

The examiner provides no basis for this argument and in fact, there is none. A statement in Klapper et al. that "a night vision camera 1101 is mounted below the bridge of a marine vessel 1103" does not imply that an adapter plate is used in mounting the night vision camera 1101.

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970)." MPEP § 2143.03.

"To establish a *prima facie* case of obviousness, . . . there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." MPEP § 2142.

The prior art cited by the examiner does not disclose the limitations of claim 24. Since the limitations of claim 24 are not disclosed by the prior art, there is no way that a person skilled in the art would be motivated to incorporate such limitations in the Klapper et al. and Maruyama et al. inventions.

The examiner has not established the *prima facie* obviousness of claim 24.

II-NEW. WHETHER CLAIM 12 IS UNPATENTABLE UNDER 35 U.S.C. § 103 (a) IN VIEW OF KLAPPER et al. (U.S. 5,729,016), MARUYAMA et al. (JP 08-116476), SENNO (JP 08-160874), SERGEANT et al. (U.S. 5,107,286), AND O'FARRILL et al. (U.S. 5,528,328)

CLAIM 12

Claim 12 reads as follows:

12. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a camera enclosure with bezel opening that is threaded to accept optical filters and is sealed with an o-ring for moisture blocking.*

The examiner cites O'Farrill et al, (col. 1, lines 15-23) as disclosing "a camera enclosure with bezel opening that is threaded to accept optical filters." Examiner's Answer, p. 9. However, the cited passage pertains to screw-on threaded fittings for attaching accessories to the lens of a camera. It discloses nothing about threaded bezel openings to accept optical filters in camera ENCLOSURES. To emphasize the point, the O'Farrill passage has to do with attaching things to the lens of a camera—not to an enclosure that houses the camera.

The examiner cites Sergeant et al. as disclosing "a sealed camera housing 10, which includes 'O' ring 22 (Figures 1-2, Column 3, Lines 18-32)." Examiner's Answer, p. 9. This is a disclosure of a "camera housing 10" consisting of a cylindrical "casing 14" sealed with end caps 24 and 34 utilizing "o-rings 22 and 32". Sergeant et al., col. 3, lines 18-42. End caps pressed against a cylindrical tube and sealed with o-rings is not a disclosure of a "bezel opening that is

threaded to accept optical filters and is sealed with an o-ring." Sergeant et al.'s o-rings are used to seal the ends of the camera enclosure and have nothing to do with sealing an optical filter into an opening in the camera enclosure. Sergeant et al., Abstract.

The combination of inventions proposed by the examiner does not result in the invention claimed by applicants in claim 12. If the combination of the prior art does not result in applicants' claimed invention, there can be no issue of obviousness.

III-NEW. WHETHER CLAIM 13 IS UNPATENTABLE UNDER 35 U.S.C. § 103 (a) IN VIEW OF KLAPPER et al. (U.S. 5,729,016), MARUYAMA et al. (JP 08-116476), SEN'NO (JP 08-160874), AND OHARA et al. (U.S. 5,008,605)

CLAIM 13

Claim 13 reads as follows:

13. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a Field of View (FOV) stabilized camera which provides an electronic compensation to overcome mechanical gear backlash and vibration.*

The examiner cites Ohara et al. (col. 1, lines 7-14, 43-45) as disclosing applicants' "Field-of-View (FOV) stabilized camera." Examiner's Answer, pp. 9-10. However, Ohara et al. does not disclose an FOV stabilized camera *which provides an electronic compensation* to overcome mechanical gear backlash and vibration.

Ohara et al.'s invention provides a mechanical compensation to overcome mechanical gear backlash and vibration, the mechanical compensation being provided by "a lens C axially movably provided in the lens B by means of said motor 3 through a gear train 300." Ohara et al., col. 4, lines 44-46.

The "electronic compensation" of claim 31 is accomplished in applicants' invention by "electronically shifting said video field of view (175) to a different part of said image field of regard (174) that exactly offsets physical displacement due to vibration, wind forces, and gear backlash movements." Specification, p. 22. If there is any question as to the meaning of "electronic compensation", it would be appropriate to consult applicants' Specification:

"Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005).

Certainly, the Specification makes clear that applicants' electronic compensation mechanism is not the same as the mechanical compensation of Ohara et al.

According to the Manual of Patent Examining Procedure, obviousness can be established only if each limitation of the claim is described by at least one of the prior-art references:

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970)." MPEP § 2143.03.

Since none of the prior art cited by the examiner disclose the limitations of claim 13, the examiner has not established a *prima facie* case of obviousness.

IV-NEW. WHETHER CLAIM 20 IS UNPATENTABLE UNDER 35 U.S.C. § 103 (a) IN VIEW OF KLAPPER et al. (U.S. 5,729,016), MARUYAMA et al. (JP 08-116476), SEN'NO (JP 08-160874), AND TOVI (U.S. 4,225,881).

CLAIM 20

Claim 20 reads as follows:

20. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising an optically clear or tinted sphere enclosing said camera.*

The examiner cites Tovi as disclosing "a transparent globe 12, which contains camera 30 (Figure 2, Column 4, Line 63 - Column 5, Line 29)." Examiner's Answer, p. 10

Tovi does not disclose an optically clear or tinted sphere enclosing a camera as specified in claim 20. Tovi discloses a globe 12 which is coated with matte or glossy black paint 58 over a large portion of the interior of the globe. Col. 5, lines 25-28. Black paint does not produce a clear or tinted sphere.

The examiner responded to the above argument by stating that he "considers that Tovi does disclose this feature. Tovi discloses globe 12 is transparent at the lower part of the globe with the transparent film 56 (see Figure 2, Column 5, Lines 21-25). It is noted that the black paint 58 is only provided on the interior at the upper part of the globe 12, not covered the whole interior of the globe 12." 01/27/05 Office Action, p. 12.

The examiner reads the limitation of claim 20 as *further comprising a sphere enclosing said camera, the sphere being at least partially optically clear or tinted.* But this is not the

limitation of Claim 20. The plain meaning of claim 20 is that the sphere in its entirety is optically clear or tinted, and Tovi does not disclose such a sphere.

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970)." MPEP § 2143.03.

The prior art cited by the examiner does not disclose the limitations of claim 20. Since the limitations of claim 20 are not disclosed by the prior art, there is no way that a person skilled in the art would be motivated to incorporate such limitations in the Klapper et al./Maruyama et al./Sen'no combination.

The examiner has not established the *prima facie* obviousness of claim 20.

V-NEW. WHETHER CLAIM 23 IS UNPATENTABLE UNDER 35 U.S.C. § 103 (a) IN VIEW OF KLAPPER et al. (U.S. 5,729,016), MARUYAMA et al. (JP 08-116476), SEN'NO (JP 08-160874), AND BOEHLE (U.S. 5,212,655).

CLAIM 23

Claim 23 reads as follows:

23. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly is adaptable to a railroad locomotive attachment.*

The examiner cites Boehle as disclosing a "video camera 6 mounted on a roof rack 24 of a vehicle 2, the vehicle 2 is moveable along a railroad track." Examiner's Answer, p. 11. The examiner argues that a conventional sport-utility vehicle with a video camera mounted on its roof and equipped with a rail guide attachment allowing the vehicle to travel on railroad tracks is a disclosure of applicants' "mount assembly" being adaptable to a railroad locomotive attachment. The problems with the examiner's argument are two-fold: (1) the Boehle "mount assembly" is not the functional equivalent of applicants' "mount assembly" and (2) there is no disclosure of a locomotive attachment of the "mount assembly" anywhere in Boehle. applicants' "mount assembly", as defined in claim 1, performs a single function—that of acting as the interfacing structure between a fully rotatable camera and a vehicle. Boehle's "mount assembly" (support means 7) is attached at one end to camera 6 and at the other end to roof rack 24 of the sport-utility vehicle. Boehle's "mount assembly" includes a camera mount 27 and a telescopic boom including a first section 25 which attaches to the roof rack and an extendible second section 26 which attaches to the camera mount. Boehle, col. 7, lines 12-18. Boehle states that "[t]he extendible boom can include a rack and pinion arrangement to provide smooth and stable operation." Boehle, col 7, lines 18-22.

There is nothing in Boehle's disclosure of a telescopic boom being used to attach a camera to the roof top of a sport-utility vehicle that suggests applicants' "mount assembly" being adaptable to locomotive attachment.

Boehle does not disclose the limitations of claim 23.

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 165

USPQ 494, 496 (CCPA 1970)." MPEP § 2143.03.

The prior art cited by the examiner does not disclose the limitations of claim 23. Since the limitations of claim 23 are not disclosed by the prior art, there is no way that a person skilled in the art would be motivated to incorporate such limitations in the Maruyama et al. invention.

The examiner has not established the *prima facie* obviousness of claim 23.

VI-NEW. WHETHER CLAIM 25 IS UNPATENTABLE UNDER 35 U.S.C. § 103 (a) IN VIEW OF KLAPPER et al. (U.S. 5,729,016), MARUYAMA et al. (JP 08-116476), SEN'NO (JP 08-160874), AND KUJIRADA (JP 10-304339).

CLAIM 25

Claim 25 reads as follows:

25.[1] A process for viewing a scene with mobile pan or tilt camera of claim 1 comprising the steps of:

[2] mounting said camera to a vehicle for capturing mobile images;

displaying said captured mobile images on an image display screen;

[3] controlling camera position from within said vehicle;

[4] capturing said captured mobile images in an image capture box for storage and transmission of said captured mobile images; and

[5] transmitting said captured mobile images by radio frequency transmission to a data storage server for further processing; and

[6] providing said captured mobile images on internet server for official or consumer access.

The prior art cited by the examiner does not disclose the limitations in boldface.

Limitation [1]

None of the references, either separately or in combination, disclose the limitations of the mobile pan or tilt camera of claim 1, and it follows that none of the references, either separately or in combination, disclose the process for viewing a scene with the camera of claim 1.

Limitation [2]

None of the references disclose "a display-control box having an image display screen and control buttons for controlling said camera and its movement, said display-control box being attached to an adjustable mount in said vehicle within an operator's view and reach." See discussion under the heading **I-NEW, CLAIM 1**. None of the references disclose mounting such a "display-control box" in a vehicle within an operator's view and reach utilizing an adjustable mount.

None of the references disclose mounting "an image capture box for receiving said captured mobile images" in a vehicle. The only "image capture box" disclosed by the references is Maruyama et al.'s recording device which is incorporated in Maruyama et al.'s "VTR" which is a portable box carried about by a user. Maruyama et al., ¶ 13.

Limitation [3]

None of the references disclose controlling camera position from within said vehicle using a display-control box being attached to an adjustable mount in said vehicle within an

operator's view and reach.

Limitation [4]

None of the references disclose capturing mobile images in an image capture box located in the vehicle in which the camera system is installed.

Limitation [5]

None of the references disclose "transmitting said captured mobile images [in the image capture box] by radio frequency transmission to a data storage server for further processing."

Kujirada discloses "wirelessly transmitting current image data from the image pickup means." Kujirada, ¶ [0006], claim 1. Kujirada does not have an image capture box for storage and subsequent transmission of captured mobile images and therefore does not have the means to satisfy applicants' limitation [5].

Limitation [6]

None of the references disclose "providing said captured mobile images [stored in image capture box] on internet server for official or consumer access."

Kujirada discloses transmitting real-time images to a user over the internet. Kujirada, ¶ [0021]. This is not a disclosure of making non-real-time images available over the internet.

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970)." MPEP § 2143.03.

The prior art cited by the examiner does not disclose the limitations in boldface of claim 25. Since none of the boldface limitations of claim 25 are disclosed by the prior art, there is no

way that a person skilled in the art would be motivated to incorporate such limitations in the Klapper et al./Maruyama et al./Sen'no combination.

The examiner has not established the *prima facie* obviousness of claim 25.

VII-NEW. WHETHER CLAIMS 7 AND 21 ARE UNPATENTABLE UNDER 35 U.S.C. § 112, SECOND PARAGRAPH.

Claims 7 and 21 read as follows:

7. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly is adapted to engage a THULE[®] brand roof rack system.*
21. *A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly mates to a YAKIMA^R brand roof rack system.*

The examiner cites *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982) as authority for rejecting claims 7 and 21 as being indefinite because of the appearance of the THULE[®] and YAKIMA[®] trademarks in the claims. The Manual of Patent Examining Procedure, citing *Ex parte Simpson*, states that a claim would be indefinite if the trademark were used as a limitation to identify or describe a particular material or product. MPEP § 2173.05(u).

Ex parte Simpson has to do with a claim for a panel having a surface comprising a thin Hypalon membrane. Hypalon is a particular chlorosulphonated ethylene having a specific group of additives employed by the owner of the Hypalon trademark. The Board's rationale in ruling that the claim was indefinite seems to be that the record was ambiguous as to whether the "Hypalon membrane" was restricted to the particular chlorosulphonated ethylene having a

specific group of additives employed by the owner of the "Hypalon" trademark or included every "synthetic resin" as the applicants in *Ex parte Simpson* asserted.

Applicants' use of a trademark in claims 7 and 21 is different from the use by the applicants in *Ex parte Simpson*. In the *Ex parte Simpson* case, the surface material of the invention is identified by the trademark Hypalon.. Applicants' use of the trademarks THULE® and YAKIMA® is to identify the sources of the roof racks to which applicants' invention can be mated. The association of applicants' invention with these trademarks does not limit the claimed invention in any way other than specifying that the "mount assembly" is so designed as to be attachable to the roof racks sold by the owners of the THULE® and YAKIMA® trademarks.

The examiner argues that "[i]n the present case, the trademark/trade name is used to identify/describe a type of roof rack., but fails to sufficiently claim the particular structure of the roof rack that would properly define the structural boundaries of the rack as a THULE® or YAKIMA® type and, accordingly, the identification/description is indefinite." Examiner's Answer, pp. 4-5.

The examiner's argument might have some merit if applicants' had used the examiner's words "THULE® type" or "YAKIMA® type". But applicants did not refer to "THULE® type" or "YAKIMA® type roof racks in the claims. Applicants' utilized the trademarks in the proper way to indicate sources of the roof racks rather than designs or structures when they referred to THULE® brand roof rack system in claim 7 and YAKIMA® brand roof rack system in claim 21.

As the court in *In re Goffe* noted:

"To determine whether the claim language is definite we must examine the claims to see whether the metes and bounds of the present invention can be adequately determined from the claim language." *In re Goffe*, 526 F.2d 1393, 188 USPQ 131 (CCPA 1975).

There is nothing in applicants' claims 7 and 21 or in the Specification that would make the metes and bounds of applicants' claimed invention indefinite. Identifying by trademarks the sources of roof racks to which applicants' invention can be mated does not make the claims indefinite.

Claims 7 and 21 are not indefinite under 35 U.S.C. § 112, second paragraph.

CONCLUSIONS

This patent application must qualify as one of the most thoroughly examined patent applications in the history of the patent office. It has resided in the patent office now for almost nine years. Two separate searches of the prior art were performed by the original examiner who decided that none of the claims were patentable.

An appeal to the Board of Patent Appeals and Interferences resulted in the reversal of the examiner's rejection of all 25 claims of the application. After applicants' successful appeal, the examiner reopened prosecution of the application and finally rejected 23 of the 25 claims (including the only independent claim) based on a new primary reference. Applicants once again appealed to the Board.

Based on applicants' Appeal Brief, the examiner reopened prosecution once again based on a new primary reference. Applicants responded to the examiner's arguments of unpatentability based on the new reference in a Supplemental Appeal Brief and applicants petitioned for the reinstatement of the appeal. The petition was granted with the instruction that the examiner should respond appropriately to the Appeal Brief filed July 1, 2005 taken together with the Supplemental Appeal Brief [Reply Brief] filed November 3, 2005..

The examiner's response to the Decision on Petition was an Examiner's Answer to the Supplemental Appeal Brief which introduced seven new grounds of rejection based on four new references. This document is a Reply to the Examiner's Answer.

After each of five searches of the prior art, the responsible examiner has argued that applicants' claims are obvious and therefore unpatentable. The examiner responsible for the first two searches was reversed by the Board. The examiner responsible for the third search reversed

himself after reviewing applicants' Appeal Brief and performed a fourth search resulting in the new reference Maruyama et al. which became the focus of the present Supplemental Appeal Brief. In reviewing the Supplemental Appeal Brief the examiner attempted to abort the present appeal after performing a fifth search and reopening prosecution with seven new grounds of rejection based on four new references.

The examiner has rejected all of applicants' claims as being obvious in view of the new reference Maruyama et al. in various combinations with previously-cited and newly-discovered references. To establish *prima facie* obviousness, one must have a disclosure of each of the claim limitations by the prior art, motivation on the part of a person skilled in the art to combine the prior-art references, and a reasonable probability of success in accomplishing the combination. This, the examiner has been unable to do.

The examiner's rejection of claims currently rejected by the examiner should be reversed.

CLAIMS APPENDIX

1. A mobile pan and tilt camera and display-control apparatus comprising:

 a fully rotatable camera attached to a mount assembly that is mounted to a vehicle for capturing mobile images;

 a display-control box having an image display screen and control buttons for controlling said camera and its movement, said display-control box being attached to an adjustable mount in said vehicle within an operator's view and reach;

 an image capture box for receiving said captured mobile images.

2. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein full rotation is achieved by mounting said camera to a tilting mechanism mounted on a panning mechanism.

3. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said mount assembly incorporates a quick disconnect mechanism.

4. A mobile pan and tilt camera and display-control apparatus as claimed in claim 3 further comprising a double locking mechanism on said mount assembly where one mechanism is a security fastener.

5. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 further comprising a water seal attached to said tilting mechanism.

6. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly is adapted to engage the roof-rack of a vehicle.

7. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly is adapted to engage a THULE® brand roof rack system.

8. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a ball-plunger for self-locking said mount assembly.

9. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a security fastener as a secondary and operator activated mechanical locking mechanism for said mount assembly.

10. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 further comprising a singular support for both said panning mechanism and said tilting mechanism and separate drive gears and slip clutches for both said panning mechanism and said tilting mechanism.

11. A mobile pan and tilt camera and display-control apparatus as claimed in claim

10 wherein each slip clutch comprises:

a rotationally free gear;

a support housing for gear;

a friction pad co-aligned to said gear between said gear and said support housing;

a wave washer to apply a pressure against said rotationally free gear and said support housing of sufficient force to enable a motor to drive said gear and said support housing to a point where said support housing stops rotating and said rotationally free gear breaks friction of said friction pad while said motor continues to drive without overheating.

12. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a camera enclosure with bezel opening that is threaded to accept optical filters and is sealed with an o-ring for moisture blocking.

13. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a Field of View (FOV) stabilized camera which provides an electronic compensation to overcome mechanical gear backlash and vibration.

14. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said camera may be mounted at any angle with respect to gravity.

15. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising a bimetal heat sink for camera power supply temperature control.

16. A mobile pan and tilt camera and display-control apparatus as claimed in claim 12 wherein said camera enclosure is adapted to act as an additional heat sink.

17. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said camera enclosure incorporates a one-way moisture passage plug with flexible and sealed passage for wires.

18. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said display-control box has a set of control buttons positioned to be operated with a single hand.

19. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 wherein said display-control box has a viewing angle adjustment lever positioned to be operated with said single hand.

20. A mobile pan and tilt camera and display-control apparatus as claimed in claim 1 further comprising an optically clear or tinted sphere enclosing said camera.

21. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly mates to a YAKIMA^R brand roof rack system.

22. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly includes an adapter plate to mate to a light bar used on emergency and patrol guard vehicles.

23. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly is adaptable to a rail road locomotive attachment.

24. A mobile pan and tilt camera and display-control apparatus as claimed in claim 2 wherein said mount assembly includes an adapter plate for ship-board attachment.

25. A process for viewing a scene with mobile pan or tilt camera of claim 1 comprising the steps of:

mounting said camera to a vehicle for capturing mobile images;

displaying said captured mobile images on an image display screen;

controlling camera position from within said vehicle;

capturing said captured mobile images in an image capture box for storage and transmission of said captured mobile images; and

transmitting said captured mobile images by radio frequency transmission to a data storage server for further processing; and

providing said captured mobile images on internet server for official or consumer access.

EVIDENCE APPENDIX

There is no evidence submitted pursuant to §§ 1.130, 1.131, or 1.132 of Title 37 nor is there any other evidence entered by the examiner and relied upon by applicant in the appeal.

RELATED PROCEEDINGS APPENDIX

The examiner's earlier rejection of all 25 claims was the subject of Appeal No. 2000-1719. The Decision on Appeal was included with the submission of the Supplemental Appeal Brief.